

B1 (c) discriminating authenticity of the thrown coin based on a combination of an electromotive force signal detected by said receiving coil and at least one of amplitude, frequency and phase of an oscillation voltage of said exciting coil.

Please amend claim 6 (amended) as follows:

6. (Twice Amended) A method of inspecting a coin thrown into a machine, comprising the steps of:

(a) arranging an exciting coil in the vicinity of one side of a coin passage inclined at a predetermined angle so that magnetic poles thereof face the coin passage;

B2 (b) arranging two receiving coils with substantially identical characteristics in the vicinity of said one side of said coin passage so that said receiving coils are electromagnetically coupled with said exciting coil;

(c) exciting said exciting coil at a predetermined frequency to produce an electromagnetic field; and

(d) discriminating authenticity of the thrown coin based on a combination of an electromotive force signal influenced by a reactive magnetic field caused by eddy current induced on a surface of the thrown coin and detected by said two receiving coils and at least one of amplitude, frequency and phase of an oscillation voltage of said exciting coil.

Please amend claim 11 (amended) as follows:

11. (Twice Amended) An apparatus for inspecting a coin thrown into a machine, comprising:

an exciting coil arranged in the vicinity of one side of a coin passage;

a receiving coil arranged in the vicinity of said one side of said coin passage so as to be electromagnetically coupled with said exciting coil;

B3 oscillation means for exciting and oscillating said exciting coil at a predetermined frequency to produce an electromagnetic field;

first detecting means for detecting at least one of amplitude, frequency and phase of an oscillation voltage of said exciting coil,

second detecting means for detecting an electromotive force signal influenced by a reactive magnetic field caused by eddy currents induced on a surface of the thrown coin when

B3 the coin passes through said electromagnetic field produced by said exciting coil and which is generated in said receiving coil; and

discriminating means for discriminating authenticity of the thrown coin based on detection outputs from said first and second detecting means;

whereby authenticity of the thrown coin is discriminated based on a combination of an electromotive force signal detected by said receiving coil to determine a surface pattern of the thrown coin and at least one of amplitude, frequency and phase of the oscillation voltage of said exciting coil.

Please amend claim 16 (amended) as follows:

16. (Twice Amended) An apparatus for inspecting a coin thrown into a machine, comprising:

an exciting coil arranged in the vicinity of one side of a coin passage inclined at a predetermined angle so that magnetic poles thereof face the coin passage;

two receiving coils having substantially identical characteristics and arranged in the vicinity of said one side of said coin passage so that said receiving coils are electromagnetically coupled with said exciting coil;

oscillation means for exciting and oscillating said exciting coil at a predetermined frequency to produce an electromagnetic field;

first detecting means for detecting at least one of amplitude, frequency and phase of an oscillation voltage of said exciting coil;

second detecting means for detecting an electromotive force signal influenced by a reactive magnetic field caused by eddy currents induced on a surface of the thrown coin when the coin passes through said electromagnetic field and which is generated in said two receiving coils; and

discriminating means for discriminating authenticity of the thrown coin based on detection outputs from said first and second detecting means; and

whereby authenticity of the thrown coin is discriminated based on a combination of an electromotive force signal detected by said receiving coil to determine a surface pattern of the thrown coin and at least one of amplitude, frequency and phase of the oscillation voltage of said exciting coils.